

User
-globalCounter: long
-id: long
-firstName: String
-lastName: String
-role: String
-active: boolean = true
*User(_id:long,_firstName:String,_lastName:String,_role:String)
*setFirstName(_firstName:String): String
*setLastName(_lastName:String): String
*setRole(_role:String): String
*getId(): long
*getFirstName(): String
*getLastName(): String
*getRole(): String
*isActive(): boolean
*activate()
*deactivate()

Account
-globalCounter: long
-id: long
-type: String
-firstName: String
-lastName: String
-billingStreet: String
-billingUnit: String
-billingCity: String
-billingState: String
-billingZip: String
-phone: String
-email: String
-dateCreated: Date
-createdBy: String
-meters: Meter[]
-bills: Bill[]
-cancellations: Cancellation[]
-billingDay: integer
-rateTo250kWh: double
-rateTo500kWh: double
-rateTo1000kWh: double
-rateAbove1000kWh: double
*Account(_firstName:String,_lastName:String,_billingStreet:String,_billingCity:String,_billingState:String,_billingZip:String,_phone:String,_email:String,_dateCreated:Date,_createdBy:String)
*setType(_type:String): String
*setFirstName(_firstName:String): String
*setLastName(_lastName:String): String
*setBillingStreet(_billingStreet:String): String
*setBillingCity(_billingCity:String): String
*setBillingState(_billingState:String): String
*setBillingZip(_billingZip:String): String
*setPhoneNumber(_phoneNumber:String): String
*setEmail(_email:String): String
*getFirstName(): String
*getLastName(): String
*getBillingStreet(): String
*getBillingUnit(): String
*getBillingCity(): String
*getBillingState(): String
*getBillingZip(): String
*getPhoneNumber(): String
*getEmail(): String
*getDateCreated(): Date
*getCreatedBy(): String
*getId(): long
*addMeter(_meter:Meter): String
*addBill(_bill:Bill): String
*addCancellation(_cancellation:Cancellation): String
*removeMeter(_meterID:long): String
*removeBill(_billID:long): String
*removeCancellation(_cancellationID:Cancellation): String
*generateBill(_billingMonth:integer): String
*getRateTo250kWh(): double
*getRateTo500kWh(): double
*getRateTo1000kWh(): double
*getRateAbove1000kWh(): double
*setRateTo250kWh(_rate:double): String
*setRateTo500kWh(_rate:double): String
*setRateTo1000kWh(_rate:double): String
*setRateAbove1000kWh(_rate:double): String

Meter
-globalCounter: long
-id: long
-accountID: long
-street: String
-unit: String
-city: String
-state: String
-zip: String
-readings: MeterReadings[]
*setStreet(_billingStreet:String): String
*setUnit(_unit:String): String
*setState(_billingState:String): String
*setCity(_city:String): String
*setZip(_billingZip:String): String
*getStreet(): String
*getUnit(): String
*getCity(): String
*getState(): String
*getZip(): String
*getId(): long
*getAccountID(): long
*addReading(_meterReading:MeterReading): String
*getReading(_meterReadingID:long): MeterReading
*Meter(_accountID:long,_street:String,_unit:String,_city:String,_state:String,_zip:String)

MeterReading
-globalCounter: long
-id: long
-meterID: long
-kWh: double
-dateOfReading: Date
-billed: boolean
*MeterReading(_meterID:long,_kWh:double,_dateOfReading:Date)
*setKWh(_kWh:double): String
*getKWh(): double
*getReadingMonth(): integer
*setBilled(_billed:boolean)
*getReadingDate(): Date

Bill
-globalCounter: long
-id: long
-accountID: long
-dueDate: Date
-amountDue: double
-amountBilled: double
-outstandingAmount: double
-payments: Payment[]
-dateMailed: Date
-dateCreated: Date = Today's Date
-mailingFirstName: String
-mailingLastName: String
-mailingStreet: String
-mailingUnit: String
-mailingCity: String
-mailingState: String
-mailingZip: String
*getId(): long
*getAccountID(): long
*addPayment(_payment:Payment): String
*removePayment(_paymentID:long): String
*Bill(_accountID:long,_amountBilled:double,_dueDate:Date)
*print(): String

Payment
-globalCounter: long
-id: long
-dateReceived: Date
-amount: double
-dateAllocated: Date
-allocatedBy: String
-paymentMethod: String
*getId(): long
*Payment(_dateReceived:Date,_amount:double,_dateAllocated:Date,_allocatedBy:String,_paymentMethod:String)

Cancellation
-globalCounter: long
-id: long
-accountID: long
-effectiveDate: Date
-amountDue: double
-dateMailed: Date
-active: boolean = true
-dateCreated: Date = Today's Date
-mailingFirstName: String
-mailingLastName: String
-mailingStreet: String
-mailingUnit: String
-mailingCity: String
-mailingState: String
-mailingZip: String
*Cancellation(_accountID:long,_effectiveDate:Date,_amountDue:double,_dateMailed:Date)
*getEffectiveDate(): Date
*getAmountDue(): double
*getDateMailed(): Date
*isActive(): boolean
*getId(): long
*getAccountID(): long
*setEffectiveDate(_effectiveDate:Date): String
*setAmountDue(_amountDue:double): String
*activate()
*deactivate()
*print()

